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Job vacancies were reported to aid Iowa area vocational schools in developing curriculums and training program by determining: (1) occupations to be considered for training purposes in area vocational schools, (2) demand for workers in occupations under consideration by area schools, (3) oversupply in certain skills, and (4) an on-going procedure for immediate feedback of industry's most critical manpower shortages to educators. Response of 980 of 3,000 firms provided data which was analyzed by occupational group, industry classification, and county and multi-county areas. A total of 11,388 full-time vacancies were uncovered. Largest vacancies were in the benchwork occupations, processing occupations, and machine trades occupations. Results, using an inflation procedure, are presented in the appendixes under headings of: (1) number of job vacancies, by major and detailed occupations groups, Iowa and multi-county subareas, (2) number of job vacancies, by industry and major occupational group, Iowa, (3) number of job vacancies and average hourly wage rates offered, by detailed occupational group, 99 counties and (4) inflated job vacancies by major and detailed occupational groups and by industry group. Similar listings for earlier time periods are available as VT 003 596 and VT 005 639-40. (DM)

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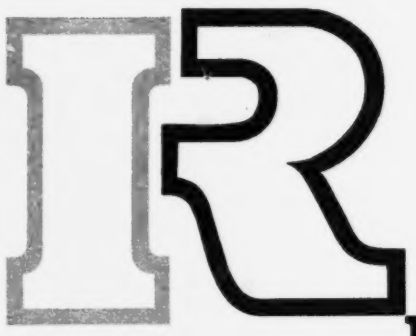

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IOWA STATE UNIVERSITY ▪ AMES, IOWA 50010

JOB VACANCIES IN IOWA MANUFACTURING ESTABLISHMENTS

as Reported for the Period

March 1968 through August 1968

Volume III, Number 1

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March 1968 through August 1968

Volume III, Number 1

This report was prepared by Edward B. Jakubauskas and Neil A. Palomba.
Assistance of Mr. Ken Mericle is gratefully acknowledged.

August 1968

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JOB VACANCIES IN IOWA MANUFACTURING ESTABLISHMENTS

MARCH-AUGUST 1968

Chapter I. Purpose of Survey

Occupational Information Needs for Area Vocational Schools

This survey is the fourth in a series designed to provide a measure of the nature and extent of job vacancies in Iowa manufacturing establishments. However, unlike the previous surveys this study includes an attempt to estimate the type and extent of job vacancies in the Iowa manufacturing firms not answering the questionnaires, as well as reporting the vacancies of the Iowa firms answering the questionnaires. (See Chapter IV and Appendix Table IV of this study.)

One of the primary reasons for this job vacancy series was the development of Iowa's Area Vocational Schools and Community Colleges. To aid the Area Vocational Schools in developing curriculum and training programs this series attempts to provide occupational employment data at a low cost. This data will hopefully answer such questions as:

(1) What specific occupations ought to be considered for training purposes in our Area Vocational Schools?

(2) Is there a substantial demand for workers in occupations and skills under consideration by area schools for training purposes?

(3) Is there likely to develop a glut on the labor market for certain skills while others continue to be in short supply?

(4) In general, can an on-going procedure be developed for immediate "feedback" of industry's most critical manpower shortages to educators involved in developing curriculum and training programs?

Multi-Purpose Nature of the Job Vacancy Survey Series

It is anticipated that the job vacancy survey series will be of assistance to a wide range of organizations interested in manpower information for planning purposes. Among these organizations are the Iowa State Manpower Development Council's On-The-Job Training Program, institutional training programs under the Manpower Development and Training Act, Vocational Rehabilitation, Employment Security, the Bureau of Labor, the Industrial Commission, and various educational institutions.

Furthermore, this series is intended to supplement long-run forecasts of manpower trends which are related to changes in technology, population distribution, and industrial structure.

Complete information on occupational employment data trends requires both types of approaches. Long-run forecasts, however, take time to develop and though valid for some future period, are subject to rapid short-run variations. Job vacancy data, though short-run in nature, has an advantage in providing an immediate and highly sensitive measure of employer skill requirement.

Chapter II. Scope of Coverage

Response Rate

The Job Vacancy Questionnaire was mailed to the approximately 3,000 manufacturing firms, employing four or more workers, listed with the Iowa Development Commission in Des Moines, Iowa. The questionnaire requested job vacancy and starting wage rate data for the six month period March through August 1968. Four weeks after the questionnaire was sent a second questionnaire was mailed to all manufacturing firms employing fifty or more employees which had not yet responded to the first questionnaire.

A completed questionnaire was received from 980 firms representing a response rate of about 33%. The resulting data has been analyzed by occupational groups, industry classification, county and multi-county areas.

Explanation of Classifications

In order to facilitate the utilization of this data, standard classifications were used as much as possible. Thus, the occupational groups used came from the Dictionary of Occupational

Titles[1] (D.O.T.) while the industry groups came from the Standard Industrial Classification (S.I.C.) established by the U.S. Bureau of the Budget.[2]

Table I in the Appendix contains each of the occupational groups for which job vacancies were reported in Iowa along with the appropriate D.O.T. number. Table II contains the industry groups in Iowa which reported job vacancies; however, since abbreviations were used in Table II the following table is provided with the abbreviated industry group name and its appropriate S.I.C. number.

Table I: Iowa Industry Groups by Standard Industrial Classification

S.I.C. NUMBER	NAME	S.I.C. NUMBER	NAME
19	Ordnance & Acc.	31	Leather & Rel.
20	Food & Rel.	32	Stone, Clay & Glass
23	Apparel	33	Primary Metal Industry
24	Lumber & Wood	34	Fabricated Metal
25	Furniture & Fixtures	35	Machinery (Except Elec.)
26	Paper & Rel.	36	Elec. Machinery
27	Printing, Publishing & Rel.	37	Transportation Equip.
28	Chemicals & Rel.	38	Control Inst.; Photo Goods; Time Inst.
29	Petroleum Refining & Rel.		
30	Rubber & Plastic	39	Misc. Mfg.

1. U.S. Department of Labor, Bureau of Employment Security, Dictionary of Occupational Titles, Volumes I and II (Washington, D.C. 1965)

2. Executive Office of the President, Bureau of the Budget, Standard Industrial Classification Manual, (Washington, D.C. 1967).

In addition to the occupational groups, Appendix Table I represents job vacancy data by multi-county sub-areas. These sub-areas were obtained by combining the 99 Iowa counties into 16 groups. Map 1 shows Iowa with the 16 multi-county sub-areas designated. These sub-areas were created to coincide with the 16 Local Coordinating Committee Areas of the Iowa Employment Security Commission. Thus, it is possible to identify each of the 16 multi-county sub-areas with the name of the city which the Employment Security Commission uses to identify their coordinating areas. Examination of Map 2 (Iowa's Area Community Colleges and Area Vocational Schools) in conjunction with Map 1 will show the close geographical similarity between these Area Schools and the 16 Multi-county sub-areas used to analyze the job vacancy data in this publication.

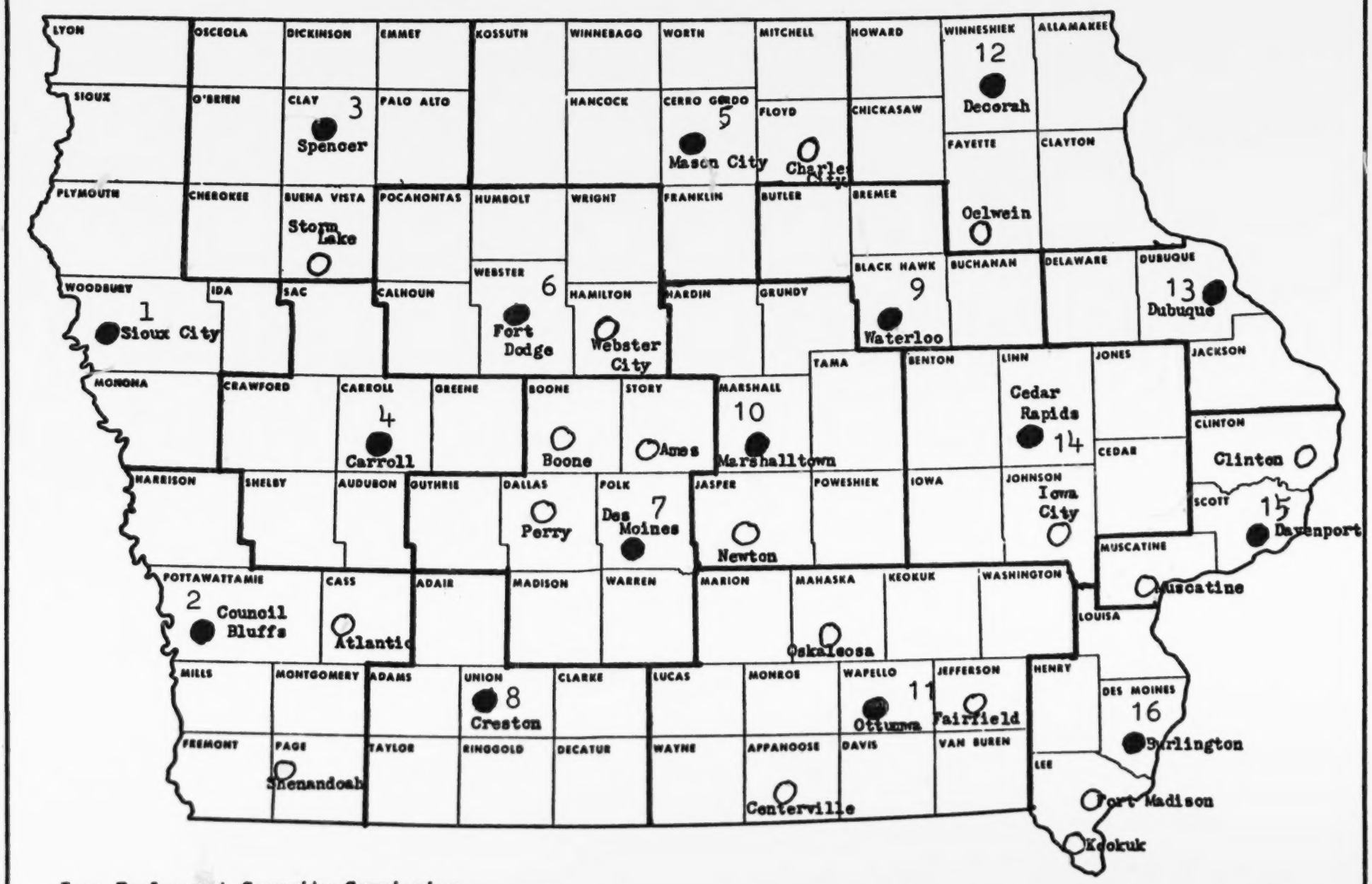
Finally, it should be noted that the wage data reported in Appendix Table III are average hourly wage data. So when a firm reported a monthly wage rate this was converted to an hourly wage rate by assuming a 40 hour week.

Coding Note

In the course of coding the occupation information uncovered by the job vacancy questionnaire some assumptions had to be made

IOWA MULTI-COUNTY SUB-AREAS AND LOCAL COORDINATING COMMITTEE AREAS

MAP 1



Iowa Employment Security Commission

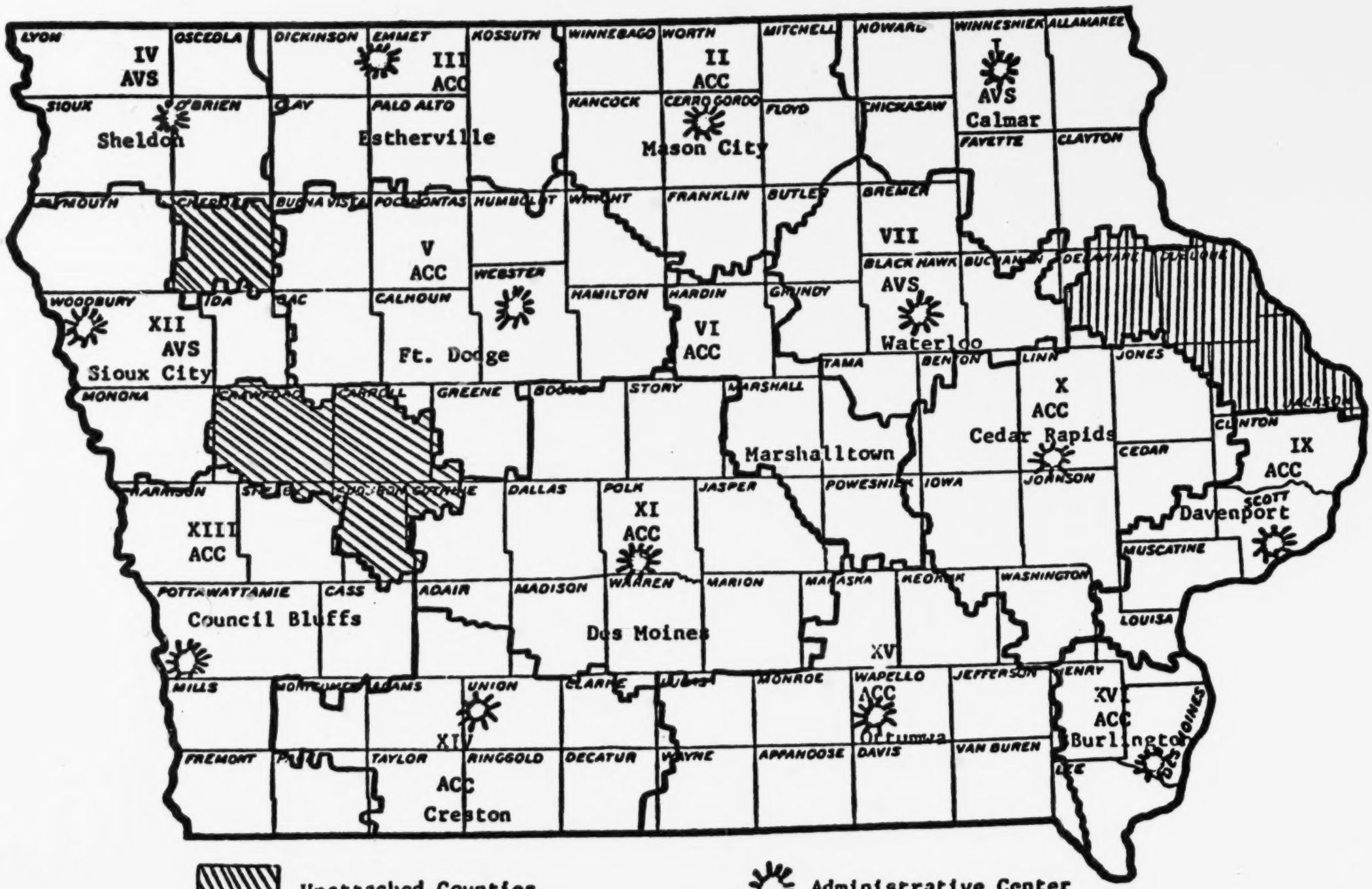
O Circles indicate Employment Service office -- solid circles indicate coordinating teams ●

ADMINISTRATIVE CENTERS AND MERGED AREAS FOR

AREA COMMUNITY COLLEGES (ACC) AND AREA VOCATIONAL SCHOOLS (AVS)

January 1, 1967

MAP 2.



where little information was given by the answering firm. A list of the assumptions follows:

Vacancies marked as follows but not otherwise specified	Assigned D.O.T. Category
(1.) Clerical or office help	209
(2.) Machinist	600
(3.) Machine operators	609
(4.) Printing pressmen	651
(5.) Sewing machine operators	787
(6.) Welders	812
(7.) Electricians	824
(8.) Printers	973
(9.) Draftsmen	007

Chapter III.

An Overview: Structure of Job Vacancies in Iowa Manufacturing Demand for Skilled Workers

This job vacancy survey of Iowa manufacturing firms uncovered 11,388 full-time vacancies for the March through August 1968 period. These vacancies range from electrical engineering to machinists to truck drivers.

As would be expected the Professional, Technical and Managerial Occupations have relatively few vacancies -- 296 of the total vacancies, due to the fact that only manufacturing firms were interviewed. Some of the most active detailed occupational groups (three digit D.O.T. number) within the Professional, Technical and Managerial Occupations uncovered by this survey are mechanical engineering (with 138 vacancies), industrial engineering (22 vacancies), and chemistry (17 vacancies).[1]

The largest number of vacancies are in the Bench Work Occupations. These occupations have 2,766 vacancies which range from the fabrication of ammunition, explosives and related occupations (761 vacancies); to metal unit assembly and adjusting occupations (484 vacancies); to nongarment sewing machine operators (364

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1. The D.O.T. number for each of these occupational titles is given in Appendix Table I of this publication.

vacancies). Other high-vacancy occupations are fabrication and repair of miscellaneous plastics occupations (360 vacancies); filing, grinding, buffing, cleaning and polishing occupations (145 vacancies); assembly and repair of electrical equipment occupations (111 vacancies); and fabrication and repair of assorted materials occupations (99 vacancies).

The second largest number of unfilled jobs (2,569 vacancies) are in the Processing Occupations. Half of these vacancies are in the food and related processing occupations (1,296 vacancies). Other high-vacancy occupations are chemical and related processing occupations (418 vacancies); ore refining and foundry work occupations (174 vacancies); nonmetallic minerals processing occupations (167 vacancies); slaughtering, breaking and curing occupations (106 vacancies); and forming occupations (71 vacancies).

The Machine Trades Occupations have 2,327 unfilled jobs or the third largest number of job vacancies. These vacancies are concentrated in the metal machining occupations (1,354 vacancies); corrugating work occupations (316 vacancies); miscellaneous metalworking occupations (246 vacancies); turning occupations (179 vacancies); machinists and related occupations (144 vacancies); toolmakers and related occupations (89 vacancies); and metal forming occupations (63 vacancies).

The Structural Work Occupations have 1,492 vacancies with 663 of these vacancies in the large household appliances and commercial and industrial equipment occupations. The tinsmiths, coppersmiths and sheet metal occupations have 342 vacancies; while the combination arc and gas welders occupations have 220 vacancies. Other high-vacancy occupations are arc welders (85 vacancies); carpenters and related (69 vacancies); and miscellaneous construction work (29 vacancies).

The Miscellaneous Occupations have 964 vacancies. The high-vacancy occupations in this group are packaging occupations (280 vacancies); materials moving and storing occupations (190 vacancies); heavy truck drivers (182 vacancies); packaging and material handling occupations (172 vacancies); and concrete mixing truck drivers (84 vacancies).

Industry and Geographical Profile

A close examination of Appendix Table II reveals the industry profile of Iowa manufacturing job vacancies reported in this survey. The Food and Related industry group has the largest number of job vacancies with 1,992 and these are concentrated in the Processing (1,497); Miscellaneous (273); and Clerical and Sales (67) Occupations.

The Machinery (Except Electrical), and the Ordnance and Accessories industry groups are the next two in number of vacancies. The former industry has 1,510 vacancies with half of them concentrated in the Machine Trades Occupations (789 vacancies); while the latter industry group has 1,452 vacancies concentrated heavily in the Bench Work Occupations (761 vacancies).

There are 1,382 unfilled jobs in the Electrical Machinery industry group, and 823 vacancies in the Fabricated Metal group. The vacancies of the former industry group are concentrated in the Structural Work (619) and Bench Work (326) Occupations. The Fabricated Metal's vacancies are concentrated in the Structural Work (345), Machine Trades (223), and Bench Work (201) Occupations.

The above-mentioned five industry groups (two-digit S.I.C. number) have 7,159 job vacancies, or about 63% of the total full-time vacancies reported by Iowa manufacturing firms for the March through August 1968 time period.

Turning to Appendix Table I a geographical profile of Iowa manufacturing job vacancies can be developed. For example, the metal machining occupations' vacancies are concentrated in subareas 16 (Burlington), 14 (Cedar Rapids), 10 (Marshalltown), and 9 (Waterloo).

The processing, food and related occupations' vacancies are concentrated in sub-areas 11 (Ottumwa), 13 (Dubuque), 15 (Davenport), 2 (Council Bluffs), and 12 (Decorah); while the large household appliances and commercial and industrial equipment occupations' vacancies are concentrated in sub-areas 1 (Sioux City) and 16 (Burlington).

The above can be repeated for other occupations.

Comparison With Previous Surveys

An examination of the results of the first three surveys and the results of this survey yields many occupations which had relatively high vacancies in every study.

Examples from the Processing Occupations would include the ore refining and foundry work occupations; the processing, food and related occupations; the processing, chemical and related occupations; and the processing, nonmetallic minerals occupations. Examples from the Machine Trades Occupations would include the machinists and related occupations; the turning occupations; the miscellaneous metalworking occupations; and the corrugating occupations.

High-vacancy trends also seem to be emerging in the Bench Work Occupations among the metal unit assembly and adjusting

occupations; the assembly and repair of electronic components occupations; and nongarment sewing machine operators. In the Structural Work Occupations the welding occupations, and the carpenters and related occupations had relatively high vacancies reported in all four surveys. Moreover, the same was true in the Miscellaneous Occupations for the truck driver occupations, and the materials moving and storing occupations.

Chapter IV. Inflation Procedure for Iowa Manufacturing Job Vacancies

Method

Everything reported in the first three chapters and the first three appendix tables is based upon the completed questionnaires returned by Iowa firms. However, given these reported vacancies what can be said about the firms that did not return questionnaires? In the next few pages (and in Appendix Table IV) we will discuss and apply an Inflation Procedure developed by the Minnesota Employment Service, St. Paul, Minnesota.[1] This procedure enables us to estimate the job vacancies of the firms who did not respond to the questionnaire based upon the information supplied by the firms who did reply.

The Inflation Procedure groups all firms by two-digit S.I.C. industry code, and by employment size. Six employment classes are used--4-9 employees; 10-19 employees; 20-49 employees; 50-99 employees; 100-249 employees; and 250 or more employees. Thus, a group of firms in this procedure means a collection of

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1. We would like to express our gratitude to Mr. Rod Ries of the Minnesota Employment Service for sending us this Inflation Procedure.

firms with the same two-digit S.I.C. industry code and in the same employment class. The procedure has four steps.

Step One.

$$\frac{\text{Base Period Employment [Universe Group]}}{\text{Base Period Employment [Responding Group]}} = \text{Base Period Group Inflation Factor} = \alpha$$

Step Two.

$$\text{Current Period Employment [Responding Group]} \times \alpha = \text{Estimated Current Period Employment of Universe Group} = \beta$$

Step Three.

$$\frac{\text{Current Universe Employment [All employment classes in same S.I.C. industry]}}{\text{Add } \beta \text{ for each employment class in same S.I.C. industry}} = \text{Industry Adjustment Ratio} = \lambda$$

Step Four.

$$\lambda \times \alpha = \text{Adjusted Inflation Factor} = \Delta$$

The base period employment for the universe group came from the Iowa Development Commission, the responding group data came from the completed questionnaires, and the current universe employment came from the Iowa Employment Service (Des Moines, Iowa).[2] The Adjusted Inflation Factor (Δ) is derived by the above four steps for each group of firms (firms in the same employment class

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2. We would like to express our gratitude to Mr. David Johnston, Chief of Research and Statistics, Iowa Employment Service.

and the same two-digit S.I.C. industry), and then used to inflate or multiply the reported job vacancies into an estimate of the total job vacancies for all the Iowa manufacturing firms employing four or more employees.

Results

The results of applying this Inflation Procedure to the completed questionnaires are shown in Appendix Table IV. This table shows the inflated job vacancies by detailed occupational group (three-digit D.O.T.) and by industry group (two-digit S.I.C.). While we do not report the Adjusted Inflation Factor (Δ) for each group they can be supplied on request.

Appendix Table IV estimates the total full-time job vacancies in Iowa manufacturing firms for the March through August 1968 period to number 21,373. This means that the average inflation factor was 1.88 for this study.

It is hoped that the inflated job vacancies reported in this study will be a further aid to Area Vocational Schools and other interested organizations who need information on job vacancies in Iowa. Over time this Inflation Procedure will hopefully be a valuable addition to our job vacancy studies by supplying an estimate of job openings in nonresponding business firms.

TABLE I

NUMBER OF JOB VACANCIES
BY MAJOR AND DETAILED OCCUPATIONAL GROUPS
IOWA AND MULTI-COUNTY SUB-AREAS, March 1968-Aug. 1968

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	MULTI-COUNTY SUB-AREAS: 1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
	(1) Professional Technical & Managerial Occ.																	
002	Aeronautical Engineering														9			9
003	Electrical Engineering		2					1						2	10	1		16
005	Civil Engineering									1						1		2
007	Mechanical Engineering			8		1		17	1	20	27			2	8	39	15	138
008	Chemical Engineering	1									3			1		5	2	12
011	Metallurgy & Metallurgical Engineering															3		3
012	Industrial Engineering					1	3	1			3				1	8	5	22
019	Architecture and Engineering													1		1		2
020	Mathematics						1											1
022	Chemistry						1	3			1				2	9	1	17
029	Mathematics & Physical Sciences	1		1				6								3	2	13
040	Agricultural Sciences														1	2		3
041	Biological Sciences						2	2								2		6
132	Writers and Editors, Publications						2	1			2				5	4	1	15
141	Commercial Artists			1				1			1				1	2		6
142	Designers										2							2
160	Accountants and Auditors															9		9
162	Purchasing Management	4																4

DOT NO	DETAILED OCCUPATIONAL GROUP TITLE	MULTI-COUNTY SUB-AREAS																
		1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
163	Sales & Distribution Mgt.										1							1
166	Personnel & Training Administration			1														1
168	Inspecting & Investigating, Man. & Pub Ser										1							1
169	Administrative Specialties						1				1			1				3
180	Agri., Forestry, & Fishing Ind. Mgrs.	1						1			1						1	3
181	Mining Management																	1
183	Manufacturing Ind. Management					1												4
189	Misc. Managerial Work			1			3											1
199	Misc. Professional, Tech. & Managerial Occ								1									
(2)	Clerical & Sales Occ.																	
201	Secretaries			2				5	1		4				1	4		17
202	Stenographers	3						2										5
203	Typists	5											1		1	1	2	10
205	Personnel Clerks															1		1
207	Duplicating Machine Operators									1								1
209	Stenography, Typing, Filing & Rel.	6		4		2	2	7		15	62		3	5	10	39	50	205
210	Bookkeepers			1				2		1		1			2			7
213	Automatic Data Processing Equip. Oprs.																2	2
219	Computing & Accounting - Recording				1											1		2
221	Production Clerks							3										3
222	Shipping & Receiving Clerks						1	1			1	3			1	1		8
223	Stock Clerks & Rel.	11						2										13
235	Telephone Operators				1													1
249	Misc. Clerical Occupations		1		1						1							3
258	Salesman, Printing & Advertising		1		2	1					1							5
262	Salesman, Foodstuffs, Beverages, Tobacco		1	5	3				4		3	3	2		8	5		34
266	Salesman, Chemicals & Drug Preparations	1						3	2	1					1		2	10
273	Salesman, Metal & Metal Products									1								1

DOT NO	DETAILED OCCUPATIONAL GROUP TITLE	1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
	MULTI-COUNTY SUB-AREAS																	
274	Salesman, Housefurnishings							2										2
276	Salesman, Ind. Const. Mining & Drilling E.				1													1
277	Salesman, Farm & Garden Equip & Supplies														1			1
284	Salesman, Scientific Apparatus															1		1
290	Sales Clerks			1														1
292	Routemen							4	1				2	1				8
	(3) Service Occupations																	
316	Meatcutters (not slaughtering)		1															1
363	Pressing Occupations															5		5
381	Porters & Cleaners			2				30				1		1	10	120		164
	(4) Farming, Fishery, Forestry & Rel. Occ.																	
406	Horticultural Specialty Work									20								20
407	Gardening & Groundskeeping							1										1
409	Plant Farming	2	6							9	1			1		1		20
412	Poultry Farming													5				5
424	Farm Machinery Operators					1												1
429	Misc. Farming & Rel.										2			2				4
	(5) Processing Occupations																	
500	Electroplating	1												4				5
503	Pickling, Cleaning, Degreasing & Rel.														2			2
504	Heat Treating							7							5			12
512	Melting										3		1		1			5
514	Pouring & Casting								2		28					2		32
518	Molders, Coremakers & Rel.							4	8	5	2		2		3	5		29
519	Ore Refining & Foundry Work						7		3	12	16	15	2		103	16		174
520	Mixing, Compndg, Blndg, Kneading, Shaping		1					2			3		1					7

DOT NO	DETAILED OCCUPATIONAL GROUP TITLE	MULTI-COUNTY SUB-AREAS 1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
521	Separating, Crushing, Milling, Chopping	1		1		1					3			2				8
523	Heating, Rendering, Melting, Drying....	6	1		5													12
525	Slaughtering, Breaking, Curing	50	7	2	30			16								1		106
526	Cooking & Baking							1			12	1		4				18
529	Processing, Food & Rel.	43	163	34	12		12	25	15		9	250	125	179	73	175	181	1296
534	Calendering, Sizing, Coating & Rel.							5										5
539	Processing, Paper & Rel.										3					2		5
550	Mixing & Blending														1			1
556	Casting & Molding							2			2			20				24
557	Extruding							6							6			12
558	Reacting					2	3									35		40
559	Processing Chemical & Rel.	46		16		10	10	177	11	6	7				39	31	65	418
569	Processing, Wood & Wood Products			20								1		5				26
573	Baking, Drying & Heat-Treating							1										1
574	Impregnating Coating & Glazing										2							2
575	Forming		21	2				25			3				20			71
579	Processing, Nonmetallic Minerals	23		3	5	6	28	60		37		3			2			167
589	Processing, Leather & Textiles				35									12		17		64
599	Misc. Processing Occ.												2		25			27
(6)	Machine Trade Occupations																	
600	Machinists & Rel.	6		6		5	3	9	3	26	1	16			22	41	6	144
601	Toolmakers & Rel.	1		2		1	2	10	1	35	3	17			3	13	1	89
602	Gear Machining														1			1
603	Abrading								5		2					5		12
604	Turning	11					6	2		2	109	10	6	4	5	24		179
605	Milling & Planing									2					6	30		38
606	Boring						7			10	3				5	8		33

DOT NO	DETAILED OCCUPATIONAL GROUP TITLE	MULTI-COUNTY SUB-AREAS 1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
607	Sawing														1			1
609	Metal Machining	15	6	35		2		111	3	133	141	43	9	13	230	127	486	1354
614	Extruding & Drawing	5																5
615	Punching & Shearing	3	5			2		13		1	10							34
616	Fabricating Machinery Work							3								50		53
617	Metal Forming									20	35	6					2	63
619	Misc. Metalworking	1			1	12		49		5	162				10		6	246
620	Motorized Vehicle & Eng. Equip. Repair							2										2
626	Metalworking Machinery Repair														4	1		5
638	Misc. Machine Installation & Repair	2				1	2	7			2	5			8	2	3	32
639	Mechanics & Machinery Repairmen														15			15
641	Folding, Creasing, Scolding & Gluing									1								1
643	Corrugating work	2					8	111		2	1	1			60	80	51	316
649	Paperworking									2								2
650	Typesetting & Composing		1		1	1	3				1	2			1			10
651	Printing Press Work	2	1		1		2	9		3	5		1	8	10	5	3	50
653	Bookbinders & Rel.							1										1
659	Printing Work									3								3
660	Cabinetmakers	10						4					1				2	17
661	Patternmakers										1							1
664	Turning																3	3
667	Sawing												2	2	1			5
669	Wood Machining											7			1			8
690	Plastics, Synthetics, Rubber, & Leather Work										6				1	2		9
699	Misc. Machine Trades Occ.						5	1										6
(7)	Bench Work Occupations																	
705	Filing, Grinding Buffing, Cleaning & Pol.	1				3		1			60					50	30	145
706	Metal Unit Assembly & Adjusting	5		4		2	23	190		1	38	60		3	142	5	11	484

DOT NO	DETAILED OCCUPATIONAL GROUP TITLE	MULTI-COUNTY SUB-AREAS															
		1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
710	Fab. & Rpr. of In. to Meas. Phys. Char.										5			10	1	40	9	65
714	Fab. & Rpr. of Photo. Equip. & Supplies															7		7
720	Assembly & Rpr. of Radio & TV	25																25
721	Assembly & Rpr. of Motors, Gen. & Rel.															2		2
723	Assembly & Rpr. of Elec. Appl. & Fixtures					2												2
726	Assembly & Rpr. of Elec. Components						25								11		30	66
727	Storage Battery Assembly											6						6
729	Assembly & Rpr. of Elec. Equip.							1							60		50	111
731	Fab. & Rpr. of Games & Toys										2							2
732	Fab. & Rpr. of Sporting Goods			25														25
737	Fab. of Amm., Fireworks, Explosives & Rel.	1								10							750	761
739	Fab. & Rpr. of Assorted Materials		4			4		46		30			5			10		99
740	Painters, Brush											1						1
741	Painters, Spray	1					3	1		6							1	12
749	Painting, Decorating & Rel. Work														2			2
754	Fab. & Rpr. of Misc. Plastics					6		30						2	262	60		360
761	Laying Out, Cut., Carv., Shap. & Sand. Wood												1			30		31
762	Assembly of Wood Products											4		15				19
763	Fab. & Rpr. of Furniture																34	34
769	Fab. & Rpr. of Wood Products							8		1	3	10	1	10			32	65
771	Stone Cutting & Carving									1								1
780	Upholstering, Mattress Fab. & Rpr.													10				10
781	Laying Out, Marking, Cutting & Punching											5				2		7
782	Handsewers, Menders, Embroid, Knit, & Rel.															2		2
784	Fab. & Rpr. of Hats, Gloves & Rel.											3						3
785	Tailors & Dressmakers										1					50		51

DOT NO	DETAILED OCCUPATIONAL GROUP TITLE	MULTI-COUNTY SUB-AREAS 1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
787	Sewing Machine Oprs., Nongarment		1	26	3			44			6	226		15		18	25	364
789	Fab. & Rpr. of Textile Leather & Rel.									4								4
(8)	Structural Work Occupations																	
801	Fitting, Bolting, Screwing & Rel.														4	2		6
804	Tinsmiths, Coppersmiths & Sheet Metal	28					3	88	1	30		54	7		45	11	75	342
806	Transportation Equip. Ass. & Rpr.					6												6
809	Misc. Metal Fabrication								2			7			4	2		15
810	Arc Welders		2			2		9		47	5	2			4	10	4	85
811	Gas Welders														2			2
812	Combination Arc & Gas Welders	19		10	1	2	13	57	1	17		32	4	2	47		15	220
813	Resistance Welders										6	1						7
819	Welders, Flame Cutters & Rel.	1																1
824	Lighting Equip. Building Wiring & Rpr.					2	4									2		8
827	Large Hsld. Appl. & Com. & Ind. Equip.	543						5									115	663
828	Elec. & Electr. Prod. Fab. Inst. & Rpr.									1								1
829	Assembly , Instl. & Rpr. Electrical Prod.									1			1					2
840	Construction & Mntnc. Painting & Rel.									1								1
850	Excavating Grading & Rel.																4	4
853	Asphalt Paving																2	2
860	Carpenters & Rel.		10	8		2		5			3	5	1		2		33	69
862	Plumbers, Gasfitters, Steamfitters & Rel.												1					1
865	Glaziers & Rel.											3		1	2			6
869	Misc. Construction Work						3	1							25			29
899	Misc. Structural Work			1		3		5				2			3	5	3	22
(9)	Miscellaneous Occupations																	
900	Concrete Mixing Truck Drivers	9	2	3	4		5	14		19	3		2	4	5	9	5	84

DOT NO	DETAILED OCCUPATIONAL GROUP TITLE	MULTI-COUNTY SUB-AREAS																
		1 Sioux City	2 Council Bluffs	3 Spencer	4 Carroll	5 Mason City	6 Fort Dodge	7 Des Moines	8 Creston	9 Waterloo	10 Marshalltown	11 Ottumwa	12 Decorah	13 Dubuque	14 Cedar Rapids	15 Davenport	16 Burlington	IOWA TOTAL
902	Dump Truck Drivers						1											1
905	Truck Drivers, Heavy	2	7	15	5	5	4	12	2	3	7	7	7	4	84	14	4	182
906	Truck Drivers, Light			3							3					2		8
920	Packaging	2		14	1	1	6	73		1	8	3	5		21	97	48	280
921	Hoisting & Conveying			1		1	1	2						1				6
922	Materials Moving & Storing	7		1				43	2	3	6	2	4	7	4		111	190
929	Packaging & Material Handling	1			24	15	10	14		3	10	5			12	52	26	172
930	Boring, Drilling, Cutting & Rel.																2	2
932	Loading & Conveying																1	1
939	Extraction of Minerals																2	2
970	Art Work, Brush, Spray or Pen							1										1
971	Photoengraving	1						1							1		2	5
973	Hand Compositors, Typesetters & Rel.	1	1			2	2	3		1	1				6		1	18
975	Stereotypers & Rel.										1							1
977	Bookbinding & Rel.							1										1
979	Graphic Art Work							10										10
		910	245	258	138	108	217	1423	69	554	861	823	193	350	1357	1419	2463	11,388

TABLE II

NUMBER OF JOB VACANCIES
BY INDUSTRY AND MAJOR OCCUPATIONAL GROUP,
IOWA, MAR. 1968-AUG. 1968 (FULL-TIME)

INDUSTRY GROUP	MAJOR OCCUPATIONAL GROUP									
	PROFESSIONAL, TECHNICAL, & MANAGERIAL	CLERICAL & SALES	SERVICE	FARMING, FISHERY FORESTRY & RELATED	PROCESSING	MACHINE TRADES	BENCH WORK	STRUCTURAL WORK	MISCELLANEOUS OCC.	TOTAL
Ordnance & Acc.	9	50	120	411			761	1	100	1452
Food & Rel.	42	67	5	22	1497	28		58	273	1992
Apparel		2	11				371			384
Lumber & Wood		1			21	20	25	36	31	134
Furniture & Fixtures	3	8				18	170	12	18	229
Paper & Rel.	2		6		23	235	40	4	82	392
Printing, Publishing & Rel.	21	29				169			36	255
Chemicals & Rel.	28	21	1	8	315	3	250	6	74	706
Petroleum Refining & Rel.								2	2	4
Rubber & Plastic			27		154	9	66			256
Leather & Rel.					17					17
Stone, Clay & Glass	6	1		20	241	26	1	32	241	568
Primary Metal Industry	17	8			225	57	90	11	10	418
Fabricated Metal	10	10			21	223	201	345	13	823
Machinery (except elec.)	57	33			48	789	306	201	76	1510
Elec. Machinery	54	69		1	4	308	326	619	1	1382
Transportation Equip.					2	62	7	140	2	213
Control Inst; Photo goods; Time Inst.	36	36			1	223	27	1		324
Misc. Mfg.	11	7				157	125	24	5	329
TOTALS	296	342	170	462	2569	2327	2766	1492	964	11388

TABLE III

NUMBER OF JOB VACANCIES AND AVERAGE HOURLY WAGE RATES OFFERED,
BY DETAILED OCCUPATIONAL GROUP,
99 COUNTIES. MARCH 1968-AUGUST 1968 (FULL-TIME)

SUB-AREA 1

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE 1/
Ida	Stock Clerks & Rel.	1	2.00
	Extruding & Drawing	5	2.25
	Corrugating Work	2	1.60
	Cabinet Makers	10	1.93
	Photoengraving	1	1.60
Lyon	Plant Farming	1	1.60
Plymouth	Salesman, Chemicals & Drug Preparations	1	3.13
	Heating, Rendering, Melting, Drying...	6	--
	Machinists & Rel.	1	1.65
	Misc. Machine Installation & Repair	2	1.65
	Printing Press Work	1	1.80
	Materials Moving & Storing	3	1.60
Sioux	Agri., Forestry, & Fishing Ind. Mgrs.	1	2.20
	Plant Farming	1	1.60
	Separating, Crushing, Milling & Chopping	1	1.60
	Processing, Nonmetallic Minerals	2	1.65
	Machinists & Rel.	2	2.02
	Tool Makers & Rel.	1	2.10
	Metal Machining	7	2.05
	Fab. of Amm., Fireworks, Explosives & Rel.	1	2.00
	Tinsmiths, Copersmiths & Sheet Metal	15	1.75
	Comb. Arc & Gas Welders	2	2.02
	Large Hsld. Appl. & Com. & Ind. Equip.	43	1.60
	Concrete Mixing Truck Drivers	9	1.68
	Truck Drivers, Heavy	2	1.70
Woodbury	Chemical Engineering	1	--
	Mathematics & Physical Sciences	1	--
	Purchasing Mgt.	4	--
	Stenographers	3	2.08
	Typists	5	1.96
	Stenography, Typing, Filing & Rel.	6	1.91
	Stock Clerks & Rel.	10	1.93
	Electroplating	1	3.00

1/ Employers reported beginning wage rate.

Dash indicates wage data not reported.

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Woodbury (cont.)	Slaughtering, Breaking, Curing	50	2.79
	Processing, Food & Rel.	43	2.68
	Processing, Chemical & Rel.	46	--
	Processing, Nonmetallic Minerals	21	1.71
	Machinists & Rel.	3	2.40
	Turning	11	2.06
	Metal Machining	8	2.08
	Punching & Shearing	3	2.15
	Misc. Metal Working	1	2.64
	Printing Press Work	1	3.50
	Filing, Grinding, Buffing, Cleaning & Pol.	1	3.25
	Metal Unit Assembly & Adjusting	5	1.95
	Assembly & Rpr. Radio & T.V.	25	2.33
	Painters Spray	1	2.53
	Tinsmiths, Copersmiths & Sheet Metal	13	2.11
	Comb. Arc & Gas Welders	17	2.41
	Welders, Flame Cutters & Rel.	1	3.03
	Large Hsld. App. & Com. & Ind. Equip.	500	1.74
	Packaging	2	2.35
	Materials Moving & Storing	4	2.00
	Packaging & Material Handling	1	2.72
	Hand Compositors, Type Setters & Rel.	1	3.50
	SUB-AREA 2		
Cass	Fab. & Rpr. of Assorted Materials	4	1.60
	Sewing Machine Oprs., Nongarment	1	1.60
	Arc Welders	2	1.60
	Truck Drivers, Heavy	1	2.10
Fremont	Salesmen, Foodstuff, Beverages, Tobacco	1	1.75
Harrison	Printing Press Work	1	2.00
	Hand Compositors, Type Setters, & Rel.	1	--
Montgomery	Forming	20	2.00
	Truck Drivers, Heavy	2	1.60
Page	Plant Farming	5	--
	Processing Food & Rel.	3	1.60
	Metal Machining	6	2.34
	Type Setting and Composing	1	--
	Carpenters & Rel.	10	2.65
	Truck Drivers, Heavy	3	1.60
Pottawat-tamie	Electrical Eng.	2	3.95
	Misc. Clerical Occ.	1	3.40

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Pottawat-tamie (cont.)	Salesman, Printing & Adv.	1	3.00
	Meat Cutters (not slaughtering)	1	3.50
	Plant Farming	1	1.60
	Mixing, Compndg., Blndg., Kneading & Shaping	1	1.80
	Heating, Rendering, Melting, Drying	1	1.80
	Slaughtering, Breaking, Curing	7	2.50
	Processing, Food & Rel.	160	1.64
	Forming	1	1.60
	Punching & Shearing	5	1.80
	Concrete Mixing Truck Drivers	2	1.60
	Truck Drivers, Heavy	1	1.60
	SUB-AREA 3		
Buena Vista	Mathematics & Physical Sciences.	1	--
	Secretaries	2	2.03
	Bookkeepers	1	--
	Sales Clerks	1	1.75
	Separating, Crushing, Milling, Chopping	1	1.90
	Processing, Chemicals & Rel.	8	1.60
	Truck Drivers, Heavy	6	1.93
	Packaging	2	1.93
	Hoisting & Conveying	1	1.85
Cherokee	Mechanical Engineering	2	2.50
	Slaughtering, Breaking, Curing	2	1.95
	Processing, Food & Rel.	4	1.70
	Metal Machining	14	1.72
	Combination Arc & Gas Welders	9	1.86
	Truck Drivers, Heavy	5	1.80
	Truck Drivers, Light	3	1.75
	Packaging	5	1.75
Clay	Processing, Wood & Wood Prod.	20	1.95
	Processing Nonmetallic Minerals	1	1.60
	Metal Unit Assembly & Adjusting	4	1.70
	Sewing Machine Oprs., Nongarment	10	1.60
	Truck Drivers, Heavy	2	1.60
	Materials Moving & Storing	1	1.75
Dickinson	Mechanical Engineering	6	3.15
	Commercial Artists	1	--
	Personnel & Training Administration	1	--
	Misc. Managerial Work	1	2.00
	Forming	2	--
	Processing, Nonmetallic Minerals	2	1.74

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Dickinson (cont.)	Machinists & Rel.	5	2.82
	Toolmakers & Rel.	2	3.50
	Metal Machining	21	1.87
	Fab. & Rpr. of Sporting Goods	25	1.60
	Carpenters & Rel.	8	1.92
	Concrete Mixing Truck Drivers	1	1.74
	Truck Drivers, Heavy	2	2.07
	Packaging	2	1.65
Emmet	Stenography, Typing, Filing & Rel.	4	1.60
	Salesman, Foodstuffs, Beverages, Tobacco	5	3.75
	Porters & Cleaners	2	1.60
	Processing, Food & Rel.	30	3.09
	Packaging	3	2.29
O'Brien	Sewing Machine Oprs., Nongarment	16	1.70
	Packaging	2	2.20
Osceola	Concrete Mixing Truck Drivers	2	1.60
Palo Alto	Processing, Chemical & Rel.	8	1.70
	Machinists & Rel.	1	3.00
	Combination Arc & Gas Welders	1	1.80
	SUB-AREA 4		
Audubon	Heating, Rendering, Melting, Drying	1	1.90
	Truck Drivers, Heavy	1	1.60
Crawford	Computing & Accounting-Recording	1	3.50
	Telephone Oprs.	1	1.60
	Misc. Clerical Occ.	1	1.60
	Salesman, Printing & Adv.	1	3.50
	Heating, Rendering, Melting, Drying	4	2.81
	Slaughtering, Breaking, Curing	30	2.81
	Processing, Food & Rel.	7	2.81
	Processing, Leather & Textiles	35	2.63
	Typesetting & Composing	1	2.60
	Misc. Structural Work	1	2.81
	Concrete Mixing Truck Drivers	4	1.90
	Packaging & Material Handling	24	3.01
Greene	Salesman, Printing & Adv.	1	3.00
	Misc. Metal Working	1	--
	Printing Press Work	1	2.50
	Sewing Machine Oprs., Nongarment	3	--
	Combination Arc & Gas Welders	1	--
	Truck Drivers, Heavy	3	1.67

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Sac	Salesman, Foodstuffs, Beverages, Tobacco	1	3.00
	Processing, Food & Rel.	5	1.80
	Processing, Nonmetallic Minerals	5	1.75
Shelby	Salesman, Foodstuffs, Beverages, Tobacco	2	2.20
	Salesman, Ind. Const. Mining & Drilling Equip.	1	6.00
	Truck Drivers, Heavy	1	2.20
	Packaging	1	2.20
	SUB-AREA 5		
Cerro Gordo	Industrial Engineering	1	--
	Salesman, Printing & Adv.	1	3.00
	Processing, Chemicals & Rel.	10	2.51
	Processing, Nonmetallic Minerals	6	2.65
	Punching & Shearing	2	3.75
	Filing, Grinding, Buffing, Cleaning & Pol.	3	2.25
	Fab. & Rpr. of Misc. Plastics	6	1.87
	Arc Welders	2	3.37
	Lighting Equip., Building Wiring & Rpr.	1	3.30
	Carpenters & Rel.	2	1.80
	Packaging & Material Handling	9	2.22
Floyd	Reacting	2	2.10
Franklin	Mechanical Engineering	1	--
	Manufacturing Industry Mngt.	1	--
	Misc. Machine Installation & Rpr.	1	--
	Typesetting & Composing	1	1.87
	Packaging & Material Handling	1	--
	Hand Compositors Typesetters & Rel.	1	1.60
Hancock	Stenography, Typing, Filing & Rel.	2	1.29
	Transportation Equip. Ass. & Rpr.	6	1.85
	Comb. Arc & Gas Welders	2	2.00
	Truck Drivers, Heavy	5	1.85
	Hand Compositors, Typesetters & Rel.	1	1.80
Kossuth	Machinists & Rel.	5	2.23
	Metal Machining	2	2.25
	Misc. Metalworking	12	2.12
Winnebago	Separating, Crushing, Milling, Chopping	1	1.65
	Toolmakers & Rel.	1	3.25
	Metal Assembly & Adjusting	2	1.75
	Assembly & Rpr. of Elec. Appl. & Fixt.	2	1.60
	Fab. & Rpr. of Assorted Material	4	1.60
	Lighting Equip. Building Wiring & Rel.	1	2.80

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Winnebago (cont.)	Misc. Structural Work	3	2.03
	Packaging & Material Handling	5	1.92
Worth	Farm Machinery Opr.	1	1.75
	Packaging	1	1.60
	Hoisting & Conveying	1	1.60
	SUB-AREA 6		
Calhoun	Typesetting & Composing	2	2.05
	Hoisting & Conveying	1	1.75
Hamilton	Ore Refining & Foundry Work	6	2.50
	Processing, Food & Rel.	9	2.10
	Processing, Chem. & Rel.	5	1.75
	Truck Drivers, Heavy	1	1.75
Humbolt	Machinists & Rel.	3	2.48
	Metal Unit Assembly & Adjusting	5	2.41
	Painters Spray	3	2.48
	Combination Arc & Gas Welders	3	2.48
Pocahontas	Ore Refining & Foundry Work	1	2.25
	Turning	6	1.70
	Boring	7	1.74
	Typesetting & Composing	1	2.45
	Printing Press Work	2	2.75
	Metal Unit Assembly & Adjusting	3	1.80
	Lighting Equip., Building Wiring & Rpr.	4	3.50
Webster	Industrial Engineering	3	2.74
	Mathematics	1	--
	Chemistry	1	--
	Biological Sciences	2	--
	Writers & Editors, Publications	2	--
	Administrative Specialties	1	--
	Misc. Managerial Work	3	--
	Stenography, Typing, Filing & Rel.	2	1.75
	Shipping & Receiving Clerks	1	2.80
	Processing, Food & Rel.	3	3.09
	Reacting	3	2.98
	Processing, Chemicals & Rel.	5	2.25
	Processing, Nonmetallic Minerals	28	2.00
	Toolmakers & Rel.	2	3.06
	Misc. Machine Installation & Rpr.	2	3.15
	Corrugating Work	8	2.10

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Webster (cont.)	Misc. Machine Trades Occ.	5	1.74
	Metal Unit Assembly & Adjusting	15	2.54
	Assembly & Rpr. of Elec. Components	25	1.70
	Combination Arc & Gas Welders	10	2.54
	Misc. Construction Work	3	1.60
	Concrete Mixing Truck Drivers	4	1.90
	Truck Drivers, Heavy	3	2.12
	Packaging & Material Handling	10	2.39
Wright	Coppersmiths, Tinsmiths & Sheet Metal	3	1.60
	Concrete Mixing Truck Drivers	1	1.70
	Dump Truck Drivers	1	1.70
	Packaging	6	2.28
	Hand Compositors, Typesetters & Rel.	2	2.00
	SUB-AREA 7		
Boone	Agri., Forestry & Fishing Ind. Mgrs.	1	3.30
	Porters & Cleaners	1	2.00
	Molders Coremakers & Rel.	4	2.87
	Mixing, Compndg., Blndg., Kneading, Shaping	1	2.60
	Machinists & Rel.	6	2.87
	Metal Machining	12	2.31
	Tinsmiths, Coppersmiths & Sheet Metal	6	2.67
	Combination Arc & Gas Welders	6	2.79
Dallas	Mixing, Compndg., Blndg., Kneading, Shaping	1	1.70
	Slaughtering, Breaking, Curing	15	3.24
	Processing, Food & Rel.	20	3.12
	Processing, Nonmetallic Minerals	10	2.23
	Turning	2	2.55
	Metal Machining	5	2.37
	Punching & Shearing	1	--
	Filing, Grinding, Buffing, Cleaning & Pol.	1	--
	Combination Arc & Gas Welders	2	2.48
	Packaging	2	1.10
Guthrie	Writers & Editors, Publications	1	2.50
	Hand Compositors, Typesetters & Rel.	3	2.00
Polk	Electrical Engineering	1	--
	Mechanical Engineering	17	2.75
	Chemistry	3	3.00
	Mathematics & Physical Sciences	6	2.25
	Biological Sciences	2	3.00
	Commercial Artists	1	3.75

COUNTY	OCCUPATIONS	NUMBER OF VACANCIES	WAGE
Polk (cont.)	Secretaries	5	2.24
	Stenographers	2	--
	Stenography, Typing, Filing & Rel.	5	1.73
	Bookkeepers	2	2.40
	Production Clerks	3	--
	Shipping & Receiving Clerks	1	2.90
	Stock Clerks & Rel.	2	2.93
	Salesman, Chem. & Drug Preparations	3	3.00
	Salesman, House Furnishings	2	1.60
	Routemen	4	--
	Porters & Cleaners	29	2.16
	Heat Treating	7	2.43
	Slaughtering, Breaking, Curing	1	2.92
	Cooking & Baking	1	1.50
	Processing, Food & Rel.	3	2.32
	Calendering, Sizing, Coating & Rel.	5	2.10
	Casting & Molding	2	3.00
	Extruding	6	2.05
	Processing, Chem. & Rel.	177	2.61
	Baking, Drying & Heat Treating	1	2.35
	Forming	25	2.54
	Processing, Nonmetallic Minerals	50	2.49
	Machinists & Rel.	2	2.50
	Toolmakers & Rel.	2	3.89
	Metal Machining	91	2.64
	Punching & Shearing	12	2.58
	Fabricating Machine Work	3	2.08
	Misc. Metal Working	46	1.69
	Motorized Vehicle & Engine Equip. Rpr.	2	2.47
	Misc. Machine Installation & Rpr.	7	1.95
	Corrugating Work	111	1.62
	Printing Press Work	8	3.41
	Bookbinders & Rel.	1	1.70
	Cabinetmakers	4	2.80
	Misc. Machine Trades Occ.	1	2.82
	Metal Unit Assembly & Adjusting	190	2.45
	Assembly & Rpr. of Elec. Equip.	1	3.42
	Fab. & Rpr. of Assorted Materials	46	1.64
	Fab. & Rpr. of Misc. Plastics	30	1.74
	Fab. & rpr. of Wood Products	8	1.60
	Sewing Machine Opr., Nongarment	44	2.01
	Tinsmiths, Coppersmiths & Sheet Metal	80	2.39
	Arc Welders	9	3.08
	Combination Arc & Gas Welders	37	2.76
	Large Hsld. Appl. & Com. & Ind. Equip.	5	2.80
	Carpenters & Rel.	5	2.10
	Misc. Construction Work	1	3.00

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Polk (cont.)	Misc. Structural Work	5	2.94
	Concrete Mixing Truck Drivers	14	3.00
	Truck Drivers, Heavy	5	2.04
	Packaging	71	1.84
	Materials Moving & Storing	43	2.95
	Packaging & Material Handling	12	2.10
	Art Work Brush Spray or Pen	1	3.00
	Bookbinding & Rel.	1	3.61
	Graphic Art Work	10	1.91
Story	Industrial Engineering	1	9.00
	Stenography, Typing, Filing & Rel.	2	1.60
	Gardening & Groundskeeping	1	2.50
	Processing, Food & Rel.	2	1.60
	Machinists & Rel.	1	2.70
	Toolmakers & Rel.	8	3.73
	Metal Machining	3	2.25
	Misc. Metal Working	1	2.50
	Printing Press Work	1	3.00
	Painters Spray	1	2.40
	Combination Arc & Gas Welder	6	2.38
	Truck Drivers, Heavy	6	1.65
	Hoisting & Conveying	2	2.50
	Photoengraving	1	1.75
Warren	Misc. Metal Work	2	2.30
	Tinsmiths, Coppersmiths & Sheet Metal	2	1.80
	Combination Arc & Gas Welders	6	2.00
	Truck Drivers, Heavy	1	1.60
	Packaging & Material Handling	2	1.60
	SUB-AREA 8		
Adams	Processing, Food & Rel.	5	1.82
	Materials Moving & Storing	2	2.00
Clarke	Toolmakers & Rel.	1	3.00
	Metal Machining	3	1.70
Decatur	Processing, Chem. & Rel.	1	1.60
Taylor	Salesman, Foodstuffs, Beverages, Tobacco	4	--
	Salesman, Chemicals & Drug Preparations	2	3.13
	Routemen	1	1.70
	Processing, Chem. & Rel.	10	1.65

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Union	Mechanical Engineering	1	1.97
	Misc. Professional & Technical & Man. Occ.	1	2.52
	Secretaries	1	2.12
	Pouring & Casting	2	2.26
	Molders, Coremakers & Rel.	8	2.27
	Ore Refining & Foundry Work	3	2.02
	Processing, Food & Rel.	10	2.00
	Machinists & Rel.	3	2.28
	Abrading	5	2.07
	Tinsmiths, Coppersmiths & Sheet Metal	1	1.65
	Misc. Metal Fabrication	2	2.07
	Combination Arc & Gas Welders	1	1.90
	Truck Drivers, Heavy	2	2.00
	SUB-AREA 9		
Black Hawk	Civil Engineering	1	--
	Mechanical Engineering	19	4.13
	Duplicating Machine Opr.	1	2.62
	Stenography, Typing, Filing & Rel.	13	--
	Salesman, Chemicals & Drug Preparations	1	2.75
	Horticultural Specialty Work	20	2.00
	Molders, Coremakers & Rel.	5	2.56
	Ore Refining & Foundry Work	12	--
	Processing Nonmetallic Minerals	35	2.29
	Machinists & Rel.	23	3.27
	Toolmakers & Rel.	35	4.22
	Boring	8	2.80
	Metal Machining	97	2.71
	Misc. Metal Working	5	3.00
	Folding, Creasing, Scolding & Gluing	1	2.65
	Corrugating Work	2	2.46
	Paper Working	2	2.59
	Printing Press Work	2	3.17
	Printing Work	3	3.10
	Fab. of Amm., Fireworks, Explosives, & Rel.	10	2.74
	Fab. & Rpr. of Assorted Materials	30	2.24
	Painters Spray	6	2.26
	Fab. & Rpr. of Wood Products	1	2.35
	Stone Cutting & Carving	1	2.75
	Fab. & Rpr. of Textile, Leather & Rel.	4	2.35
	Tinsmiths, Coppersmiths & Sheet Metal	30	2.50
	Arc Welders	47	2.25
	Combination Arc & Gas Welders	16	2.56
	Assembly Inst. & Rpr. Electrical Products	1	2.77
	Construction & Mntnc. Painting & Rel.	1	2.50
	Punching & Shearing	1	2.50
	Metal Forming	20	2.24

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Black Hawk (cont.)	Concrete Mixing Truck Drivers	13	3.05
	Truck Drivers, Heavy	1	2.36
	Materials Moving & Storing	2	2.55
	Packaging & Material Handling	3	1.70
Bremer	Mechanical Engineering	1	--
	Salesman Metal & Metal Products	1	--
	Plant Farming	3	1.96
	Processing, Chem. & Rel.	6	1.83
	Machinists & Rel.	3	2.80
	Boring	2	2.37
	Metal Machining	36	2.29
	Metal Assembly & Adjusting	1	2.57
	Combination Arc & Gas Welders	1	2.65
	Elec. & Electr. Prod. Fab. Inst. & Rpr.	1	4.00
	Concrete Mixing Truck Drivers	6	2.12
	Hand Compositors Typesetters & Rel.	1	1.10
Buchanan	Stenography, Typing, Filing & Rel.	2	1.75
	Bookkeeping	1	1.90
	Turning	2	2.50
	Milling & Planing	2	2.50
	Printing Press Work	1	2.40
Butler	Plant Farming	6	1.88
	Processing, Nonmetallic Minerals	2	1.75
	Truck Drivers, Heavy	2	1.88
	Packaging	1	1.80
	Materials Moving & Storing	1	1.70
	SUB-AREA 10		
Grundy	Processing, Chem. & Rel.	1	1.60
	Plastics, Synthetics, Rubber & Leather Work	6	1.60
	Truck Drivers, Heavy	1	1.60
Hardin	Sales & Distribution Management	1	--
	Agri., Forestry, & Fishing Ind. Mgrs.	1	--
	Misc. Clerical Occ.	1	1.60
	Salesman, Foodstuffs, Beverages, Tobacco	1	2.00
	Misc. Farming & Rel.	2	2.25
	Separating, Crushing, Milling, Chopping	3	1.93
	Processing, Food & Rel.	2	1.93
	Fab. & Rpr. of Games & Toys	2	1.80
	Tailors & Dressmakers	1	1.60
	Sewing Machine Oprs. Nongarment	6	1.60
	Concrete Mixing Truck Drivers	1	2.00
	Truck Drivers, Heavy	5	2.13
	Truck Drivers, Light	1	1.87
	Packaging	1	1.90

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Jasper	Mechanical Engineering	8	3.00
	Commercial Artists	1	--
	Designers	2	3.61
	Secretaries	4	2.25
	Stenography, Typing, Filing & Rel.	30	2.00
	Shipping & Receiving Clerks	1	2.21
	Plant Farming	1	1.80
	Molders, Coremakers & Rel.	1	3.30
	Ore Refining & Foundry Work	4	2.04
	Casting & Molding	2	1.94
	Machinists & Rel.	1	2.44
	Turning	2	1.84
	Metal Forming	32	2.26
	Misc. Metal Working	150	2.78
	Printing Press Work	2	3.41
	Fab. & Rpr. of Wood Products	3	2.70
	Concrete Mixing Truck Drivers	2	2.00
	Truck Drivers, Light	1	1.75
	Packaging	3	1.70
Marshall	Mechanical Engineering	19	2.99
	Chemical Engineering	3	4.38
	Industrial Engineering	3	4.38
	Writers & Editors, Publications	1	--
	Inspecting & Investigating Man. & Pub. Service	1	--
	Stenography, Typing, Filing & Rel.	30	1.81
	Salesman, Printing & Adv.	1	--
	Melting	3	2.47
	Pouring & Casting	28	2.50
	Molders, Coremakers & Rel.	1	2.71
	Ore Refining & Foundry Work	12	2.20
	Cooking & Baking	12	2.58
	Processing, Chem. & Rel.	1	1.90
	Impregnating, Coating & Glazing	2	2.10
	Forming	3	1.70
	Toolmakers & Rel.	3	2.24
	Abrading	2	2.15
	Turning	107	2.59
	Boring	3	2.10
	Metal Machining	131	2.35
	Metal Forming	3	2.10
	Misc. Machine Installation & Rpr.	2	2.07
	Corrugating Work	1	3.00
	Printing Press Work	2	3.75
	Patternmakers	1	2.70
	Filing, Grinding, Buffing, Cleaning & Pol.	60	2.21

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Marshall (cont.)	Metal Unit Assembly & Adjusting	38	2.58
	Fab. & Rpr. of Instru. to Meas. Phys. Char.	5	2.00
	Arc Welders	5	2.91
	Materials Moving & Storing	6	2.28
	Packaging & Material Handling	10	2.17
	Hand Compositors, Typesetters & Rel.	1	3.48
	Stereotypers & Rel.	1	3.48
Poweshiek	Writers & Editors, Publications	1	2.50
	Stenography, Typing, Filing & Rel	2	2.00
	Processing, Chem. & Rel.	5	1.75
	Metal Machining	10	3.25
	Punching & Shearing	10	2.50
	Misc. Metal Working	12	2.00
	Typesetting & Composing	1	2.25
	Printing Press Work	1	2.25
	Resistance Welders	6	3.00
	Packaging	4	2.00
Tama	Chemistry	1	--
	Administrative Specialties	1	--
	Salesman, Foodstuffs, Beverages, Tobacco	2	--
	Mixing, Compndg., Blndg., Kneading, Shaping	3	2.00
	Processing, Food & Rel.	7	2.08
	Processing, Paper & Rel.	3	2.44
	Carpenters & Rel.	3	2.63
	Truck Drivers, Heavy	1	--
	Truck Drivers, Light	1	2.00
	SUB-AREA 11		
Appanoose	Toolmakers & Rel.	15	3.00
	Turning	10	2.85
	Metal Machining	2	1.92
	Corrugating Work	1	1.75
	Typesetting & Composing	2	2.32
Davis	Fab. & Rpr. of Wood Products	6	1.60
	Combination Arc & Gas Welders	3	2.25
	Resistance Welders	1	3.00
Jefferson	Shipping & Receiving Clerks	1	2.02
	Ore Refining & Foundry Work	15	2.40
	Machinists & Rel.	4	--
	Metal Machining	20	2.07
	Sewing Machine Oprs., Nongarment	150	1.60

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Keokuk	Wood Machining	1	1.93
	Assembly of Wood Products	1	1.78
	Carpenters & Rel.	5	1.78
	Truck Drivers, Heavy	3	1.81
	Packaging & Material Handling	3	1.67
Lucas	Misc. Metal Fabrication	7	2.00
	Combination Arc & Gas Welders	12	2.00
Mahaska	Metal Forming	6	2.25
	Metal Unit Assembly & Adjusting	4	2.05
	Sewing Machine Oprs., Nongarment	35	1.60
	Arc Welders	2	2.40
	Packaging & Material Handling	2	2.25
Marion	Shipping & Receiving Clerks	2	1.75
	Processing, Wood & Wood Products	1	1.75
	Machinists & Rel.	6	1.75
	Metal Machining	1	1.75
	Wood Machining	6	1.75
	Metal Unit Assembly & Adjusting	6	1.75
	Painters, Brush	1	1.75
	Assembly of Wood Products	3	1.75
	Fab. & Rpr. of Wood Products	4	1.75
	Sewing Machine Oprs., Nongarment	20	2.00
	Combination Arc & Gas Welders	6	1.90
	Glaziers & Rel.	3	1.75
	Packaging	1	1.75
	Materials Moving & Storing	2	1.75
Monroe	Metal Unit Assembly & Adjusting	50	1.60
	Fab. & Rpr. of Hats, Gloves & Rel.	3	1.60
	Sewing Machine Oprs., Nongarment	6	1.60
	Tinsmiths, Coppersmiths & Sheet Metal	50	1.70
VanBuren	Laying Out, Marking, Cutting & Punching	5	1.60
	Sewing Machine Oprs., Nongarment	5	1.60
	Combination Arc & Gas Welders	3	2.00
Wapello	Porters & Cleaners	1	2.12
	Cooking & Baking	1	2.30
	Processing, Food & Rel.	125	3.09
	Toolmakers & Rel.	2	3.42
	Metal Machining	10	2.20
	Misc. Machine Installation & Rpr.	5	2.80
	Tinsmiths, Coppersmiths & Sheet Metal	1	1.89
	Misc. Structural Work	2	3.25

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Washington	Bookkeepers	1	--
	Salesman, Foodstuffs, Beverages, Tobacco	3	3.25
	Processing, Food & Rel.	125	2.12
	Processing, Nonmetallic Minerals	3	2.00
	Machinists & Rel.	1	3.00
	Combination Arc & Gas Welders	3	2.50
	Truck Drivers, Heavy	4	2.15
	Packaging	2	2.00
Wayne	Machinists & Rel.	5	2.50
	Metal Machining	10	1.60
	Storage Battery Assembly	6	1.60
	Sewing Maching Oprs., Nongarment	10	1.90
	Tinsmiths, Coppersmiths & Sheet Metal	3	--
	Combination Arc & Gas Welders	5	2.50
	SUB-AREA 12		
Allamakee	Processing, Food & Rel.	105	1.67
	Printing Press Work	1	2.25
	Truck Drivers, Heavy	5	1.67
Chickasaw	Misc. Processing Occ.	2	2.00
	Turning	6	2.39
	Metal Machining	5	2.06
	Combination Arc & Gas Welders	4	2.39
	Truck Drivers, Heavy	2	2.00
Clayton	Cabinetmakers	1	--
	Sawing	2	2.25
	Fab. & Rpr. of Assorted Materials	5	1.60
	Laying Out, Cutting, Carving, Shaping & Sand. Wood	1	--
	Fabrication & Rpr. of Wood Products	1	--
	Assembly Inst. & Rpr. of Electrical Prod.	1	--
	Carpenters & Rel.	1	--
	Plumbers, Gasfitters, Steamfitters, & Rel.	1	--
	Packaging	1	1.75
	Materials Moving & Storing	4	1.80
Fayette	Typists	1	1.60
	Stenography, Typing, Filing & Rel.	3	1.75
	Salesman, Foodstuffs, Beverages, Tobacco	2	3.50
	Routeman	2	--
	Processing, Food & Rel.	4	1.75
	Tinsmiths, Coppersmiths & Sheet Metal	7	2.47
	Packaging	4	2.21
Howard	Processing, Food & Rel.	5	1.60

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Winneshiek	Processing, Food & Rel.	11	1.70
	Metal Machining	4	1.80
	Concrete Mixing Truck Drivers	2	1.60
	SUB-AREA 13		
Delware	Melting	1	2.50
	Molders, Coremakers & Rel.	2	2.85
	Ore Refining & Foundry Work	2	1.85
	Processing, Leather & Textiles	12	2.05
	Concrete Mixing Truck Drivers	4	2.15
Dubuque	Mechanical Engineering	2	2.81
	Chemical Engineering	1	--
	Architecture & Engineering	1	--
	Stenography, Typing, Filing & Rel.	5	1.87
	Routeman	1	1.85
	Cooking & Baking	4	2.04
	Processing, Food & Rel.	179	3.07
	Casting & Molding	20	1.90
	Processing, Wood & Wood Products	5	2.50
	Turning	4	2.42
	Metal Machining	13	2.02
	Printing Press Work	8	2.55
	Metal Unit Assembly & Adjusting	3	1.88
	Fab. & Rpr. of Instru. to Meas. Phys. Char.	10	2.30
	Fab. & Rpr. of Misc. Plastics	2	2.90
	Assembly of Wood Products	15	1.88
	Fab. & Rpr. of Wood Products	10	1.88
	Upholstering, Mattress Fab. & Rpr.	10	2.37
	Sewing Machine Oprs., Nongarment	15	1.98
	Combination Arc & Gas Welders	2	2.50
	Glaziers & Rel.	1	2.12
	Truck Drivers, Heavy	1	2.00
	Hoisting & Conveying	1	--
	Materials Moving & Storing	7	2.22
Jackson	Administrative Specialties	1	--
	Mixing, Compndg., Blndg., Kneading, Shaping	1	--
	Separating, Crushing, Milling, Chopping	2	--
	Sawing	2	2.88
	Truck Drivers, Heavy	3	2.10
	SUB-AREA 14		
Benton	Agricultural Sciences	1	3.50
	Stenography, Typing, Filing & Rel.	1	--
	Salesman, Foodstuffs, Beverages, Tobacco	1	3.13

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Benton (cont.)	Poultry Farming	5	1.60
	Misc. Farming & Rel.	2	--
	Processing, Nonmetallic Minerals	2	1.50
	Gear Machining	1	--
	Metal Machining	11	2.25
	Misc. Metal Working	3	2.50
	Arc Welders	4	--
	Combination Arc & Gas Welders	13	2.50
	Misc. Construction Work	25	2.60
	Truck Drivers, Heavy	1	1.80
Iowa	Writers & Editors, Publications	1	2.25
	Stenography, Typing, Filing & Rel.	1	--
	Processing, Chem. & Rel.	25	2.23
	Metal Unit Assembly & Adjusting	75	2.46
	Carpenters & Rel.	2	1.95
	Packaging	2	1.75
Johnson	Stenography, Typing, Filing & Rel.	3	2.01
	Salesman, Farm & Garden Equip. & Supplies	1	--
	Porters & Cleaners	1	2.21
	Plant Farming	1	2.00
	Processing, Chem. & Rel.	14	2.52
	Machinists & Rel.	2	3.40
	Toolmakers & Rel.	2	3.90
	Metal Working Machinery Rpr.	4	2.95
	Printing Press Work	5	2.17
	Metal Unit Assembly & Adjusting	2	2.10
	Fab. & Rpr. of Misc. Plastics	250	2.08
	Truck Drivers, Heavy	6	1.85
	Packaging	7	1.86
	Materials Moving & Storing	2	1.75
	Packaging & Material Handling	5	2.17
	Hand Compositors, Typesetters & Rel.	5	3.50
Jones	Writers & Editors, Publications	3	2.07
	Typists	1	1.60
	Bookkeepers	1	1.75
	Salesman, Foodstuffs, Beverages, Tobacco	1	1.80
	Salesman, Chemicals & Drug Preparations	1	3.00
	Processing, Food & Rel.	7	1.63
	Forming	20	--
	Sawing	1	2.50
	Typesetting & Composing	1	2.50
	Sawing	1	--
	Wood Machining	1	--
	Packaging	3	1.70

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Linn	Electrical Engineering	2	3.25
	Mechanical Engineering	8	3.07
	Industrial Engineering	1	--
	Chemistry	2	3.15
	Writers & Editors, Publications	1	3.50
	Commercial Artists	1	1.60
	Secretaries	1	2.50
	Stenography, Typing, Filing & Rel.	5	1.70
	Bookkeepers	1	2.00
	Shipping & Receiving Clerks	1	2.36
	Salesman, Foodstuffs, Beverages, Tobacco	6	--
	Electroplating	4	2.87
	Processing, Food & Rel.	66	2.80
	Mixing & Blending	1	2.55
	Extruding	6	2.49
	Misc. Processing Occ.	25	2.36
	Machinists & Rel.	20	3.02
	Toolmakers & Rel.	1	3.22
	Turning	5	3.25
	Milling & Planing	6	3.25
	Boring	5	3.10
	Metal Machining	219	2.82
	Misc. Metal Working	7	2.91
	Misc. Machine Installation & Rpr.	8	2.97
	Mechanics & Machinery Repairmen	15	3.25
	Corrugating Work	60	2.35
	Printing Press Work	5	2.87
	Plastics, Synthetics, Rubber, Leather Work	1	2.62
	Metal Unit Assembly & Adjusting	65	2.78
	Fab. & Rpr. of Instru. to Meas. Phys. Char.	1	2.13
	Assembly & Rpr. Elec. Components	11	1.95
	Assembly & Rpr. of Elec. Equip.	60	2.25
	Painting, Decorating & Rel.	2	2.32
	Fab. & Rpr. of Misc. Plastics	12	2.28
	Fitting, Bolting Screwing & Rel.	4	2.99
	Tinsmiths, Coppersmiths & Sheet Metal	45	2.71
	Misc. Metal Fabrication	4	3.06
	Gas Welders	2	2.87
	Combination Arc & Gas Welders	34	3.11
	Glaziers & Rel.	2	1.60
	Misc. Structural Work	3	2.60
	Concrete Mixing Truck Drivers	5	3.06
	Truck Drivers, Heavy	77	2.08
	Packaging	9	2.10
	Materials Moving & Storing	2	2.25
	Packaging & Material Handling	7	2.56
	Photoengraving	1	3.50
	Hand Compositors, Typesetters & Rel.	1	3.60

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
	SUB-AREA 15		
Clinton	Mechanical Engineering	6	--
	Chemical Engineering	1	--
	Industrial Engineering	1	--
	Chemistry	4	--
	Mathematics & Physical Science	3	2.61
	Biological Sciences	2	--
	Accountants & Auditors	2	--
	Personnel Clerks	1	--
	Stenography, Typing, Filing & Rel.	11	1.80
	Shipping & Receiving Clerks	1	2.85
	Salesman, Foodstuffs, Beverages, Tobacco	1	--
	Pickling, Cleaning, Degreasing & Rel.	2	2.43
	Molders, Coremakers & Rel.	2	2.71
	Ore Refining & Foundry Work	2	--
	Slaughtering, Breaking, Curing	1	--
	Processing, Food & Rel.	125	2.06
	Processing, Paper & Rel.	2	--
	Reacting	15	2.61
	Processing, Chem. & Rel.	25	2.60
	Machinists & Rel.	1	4.73
	Turning	2	2.67
	Boring	6	2.72
	Metal Machining	7	1.80
	Fabricating Machine Work	10	1.80
	Metal Working Machinery Rpr.	1	2.90
	Misc. Machine Installation & Rpr.	2	2.78
	Corrugating Work	80	2.27
	Printing Press Work	1	3.40
	Plastics Synthetics Rubber & Leather Work	2	1.75
	Tailors & Dressmakers	50	1.60
	Fitting, Bolting, Screwing & Rel.	2	2.55
	Tinsmiths, Coppersmiths & Sheet Metal	11	2.71
	Misc. Metal Fabrication	2	1.80
	Misc. Structural Work	5	2.61
	Concrete Mixing Truck Drivers	9	2.69
	Packaging & Material Handling	2	1.75
Muscatine	Chemical Engineering	4	4.83
	Chemistry	5	2.95
	Agricultural Sciences	2	--
	Accountants & Auditors	1	--
	Secretaries	2	2.50
	Salesman, Foodstuffs, Beverages, Tobacco	4	--
	Porters & Cleaners	10	2.36
	Processing, Food & Rel.	50	2.00

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Muscatine (cont.)	Processing, Chem. & Rel.	4	2.61
	Processing, Leather & Textiles	17	2.40
	Metal Machining	10	2.36
	Fab. & Rpr. of Assorted Materials	10	2.63
	Fab. & Rpr. of Misc. Plastics	60	--
	Arc Welders	10	2.63
	Truck Drivers, Heavy	14	2.10
	Packaging	10	2.72
Scott	Aeronautical Engineering	9	--
	Electrical Engineering	10	4.75
	Mechanical Engineering	33	4.65
	Metallurgy & Metallurgical Engineering	3	--
	Industrial Engineering	7	4.75
	Architecture & Engineering	1	4.50
	Writers & Editors, Publications	4	2.50
	Commercial Artists	2	2.75
	Accountants & Auditors	6	--
	Secretaries	2	2.32
	Typists	1	1.70
	Stenography, Typing, Filing & Rel.	28	2.17
	Computing & Accounting--Recording	1	1.80
	Salesman, Scientific Apparatus	1	--
	Pressing Occ.	5	2.05
	Heat Treating	5	3.29
	Melting	1	3.00
	Molders, Coremakers & Rel.	1	2.50
	Ore Refining & Foundry Work	101	2.74
	Reacting	20	2.78
	Processing, Chem. & Rel.	2	--
	Machinists & Rel.	40	3.51
	Toolmakers & Rel.	13	3.59
	Abrading	5	3.29
	Turning	22	3.39
	Milling & Planing	30	3.21
	Boring	2	3.25
	Metal Machining	110	2.61
	Fabricating Machine Work	40	--
	Printing Press Work	4	3.79
	Filing, Grinding, Buffing, Cleaning & Pol.	50	3.07
	Metal Unit Assembly & Adjustment	5	2.10
	Fab. & Rpr. of Instru. to Meas. Phys. Char.	40	--
	Fab. & Rpr. of Photo Equip. & Supplies	7	1.70
	Assembly & Rpr. of Motors Gen. & Rel.	2	2.81
	Laying Out, Cutting, Carving, Shaping & Wood Fi.	30	2.08
	Laying Out, Marking, Cutting, Punching	2	2.75
	Handsewers, Menders, Embroid. Knit. & Rel.	2	1.80
	Sewing Machine Oprs., Nongarment	18	1.86

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Scott (cont.)	Lighting Equip., Building Wiring & Rpr.	2	3.80
	Truck Drivers, Light	2	2.10
	Packaging	87	2.75
	Packaging & Material Handling	50	3.14
	SUB-AREA 16		
Des Moines	Civil Engineering	1	4.05
	Mechanical Engineering	14	3.14
	Chemical Engineering	2	4.05
	Industrial Engineering	3	4.05
	Mining Management	1	3.50
	Typists	1	1.75
	Stenography, Typing, Filing & Rel.	50	2.02
	Porters & Cleaners	120	2.59
	Molders, Coremakers & Rel.	5	2.74
	Ore Refining & Foundry Work	6	2.44
	Processing, Chem. & Rel.	20	2.06
	Machinists & Rel.	5	3.36
	Metal Machining	370	2.80
	Misc. Metal Working	6	2.44
	Misc. Machine Installation & Rpr.	3	2.81
	Printing Press Work	2	2.50
	Cabinetmakers	2	2.35
	Turning	3	2.25
	Filing, Grinding, Buffing, Cleaning & Pol.	30	2.55
	Assembly & Rpr. of Elec. Equip.	50	2.29
	Fab. of Amm. Fireworks, Explosives & Rel.	750	2.29
	Fab. & Rpr. of Furniture	34	1.92
	Fab. & Rpr. of Wood Products	32	1.81
	Large Hsld. Appl. & Con. & Ind. Equip.	115	2.12
	Excavating, Grating & Rel.	4	2.35
	Asphalt Paving	2	1.93
	Misc. Structural Work	3	2.78
	Truck Drivers, Heavy	4	2.07
	Packaging	8	1.86
	Material Moving & Storing	108	2.72
	Packaging & Material Handling	26	2.18
	Boring, Drilling, Cutting & Rel.	2	2.50
	Loading & Conveying	1	2.25
	Extraction of Minerals	2	2.59
	Photoengraving	1	2.50
Henry	Electrical Engineering	1	5.16
	Industrial Engineering	2	5.31
	Salesman, Chemical & Drug Preparations	2	2.75

COUNTY	OCCUPATION	NUMBER OF VACANCIES	WAGE
Henry (cont.)	Plant Farming	1	2.00
	Processing, Chem. & Rel.	1	2.00
	Metal Machining	10	1.80
	Corrugating Work	1	1.60
	Metal Unit Assembly & Adjusting	11	1.80
	Fab. & Rpr. of Instru. to Meas. Phys. Char.	9	2.03
	Fab. & Rpr. of Elec. Components	30	1.79
	Painters, Spray	1	1.80
	Sewing Machine Oprs., Nongarment	25	1.60
	Tinsmiths, Coppersmiths & Sheet Metal	75	1.80
	Arc Welders	4	1.80
	Combination Arc & Gas Welders	15	1.80
	Materials Moving & Storing	3	1.80
	Hand Compositors, Typesetters & Rel.	1	2.20
Lee	Mechanical Engineering	1	--
	Chemistry	1	4.69
	Mathematics & Physical Sciences	2	--
	Writers & Editors, Publications	1	3.00
	Typists	1	1.81
	Automatic Data Processing Equip. Oprs.	2	2.17
	Pouring & Casting	2	2.30
	Ore Refining & Foundry Work	10	2.39
	Processing, Food & Rel.	181	1.67
	Processing, Chem. & Rel.	44	2.62
	Machinists & Rel.	1	3.45
	Toolmakers & Rel.	1	--
	Metal Machining	106	3.10
	Metal Forming	2	--
	Corrugating Work	50	2.00
	Printing Press Work	1	3.00
	Carpenters & Rel.	33	2.11
	Concrete Mixing Truck Drivers	5	2.70
	Packaging	40	2.00
Louisa	Photoengraving	1	2.70

TABLE IV

INFLATED JOB VACANCIES BY MAJOR AND DETAILED OCCUPATIONAL GROUP AND BY INDUSTRY GROUP, March 1968-Aug. 1968

DETAILED OCCUPATIONAL GROUP		INDUSTRY GROUPS																				
DOT NO.	TITLE	ORDNANCE & ACC.	FOOD & REL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & REL.	PRINTING, PUBL. & REL.	CHEMICALS & REL.	PETROLEUM REF & REL.	RUBBER & PLASTIC	LEATHER & REL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
	(1) Professional Technical & Managerial Occ.																						
002	Aeronautical Engineering								9														9
003	Electrical Engineering												4	6			13		6				25
005	Civil Engineering	1																					5
007	Mechanical Engineering	4	13			2			21				7	4	12	108	17		19	5			212
008	Chemical Engineering	2	5				1		9										3				20
011	Metallurgy & Metallurgical Engineering													3									3
012	Industrial Engineering	2	4										1	4		2	14		6				33
019	Architecture and Engineering												5						2				7
020	Mathematics		2																				2
022	Chemistry		14				1		19										2				36
029	Mathematics & Physical Sciences		6						12														18
040	Agricultural Sciences		7																				7
041	Biological Sciences		3						4														7
132	Writers and Editors, Publications							101															101
141	Commercial Artists							40												3			43
142	Designers																			2			2
160	Accountants and Auditors		5						6														11
162	Purchasing Management		9																				9
163	Sales & Distribution Mgt.					2																	2
166	Personnel & Training Administration																			1			1
168	Inspecting & Investigating, Man. & Pub. Serv.							2															2
169	Administrative Specialties		7					3															10
180	Agri., Forestry & Fishing Ind. Mgrs.		10																				10
181	Mining Management												5										5
183	Manufacturing Ind. Management		2																				2
189	Misc. Managerial Work		6																	1			7
199	Misc. Professional, Tech. & Man. Occ.													1									1

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	ORDNANCE & ACC.	FOOD & REL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & REL.	PRINTING, PUBL. & REL.	CHEMICALS & REL.	PETROLEUM REF & REL.	RUBBER & PLASTIC	LEATHER & REL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
	INDUSTRY GROUPS																						
	(2) Clerical & Sales Occ.																						
201	Secretaries		4			1		2	10					1		7				4			29
202	Stenographers															5	6						11
203	Typists		3			1		3	1					1			11						20
205	Personnel Clerks		19																				19
207	Duplicating Machine Operators							5															5
209	Stenography, Typing, Filing & Rel.	50	34			10		70	19					3	3	42	76		35	5			347
210	Bookkeepers		2		4			9								3							18
213	Automatic Data Processing Equip. Oprs.													2									2
219	Computing & Accounting-Recording					1		2															3
221	Production Clerks															7							7
222	Shipping & Receiving Clerks		4						1					3	6	3			2	2			21
223	Stock Clerks & Rel.														7		22						29
235	Telephone Operators							2															2
249	Misc. Clerical Occupations							2					5				3						10
258	Salesman, Printing & Advertising							15															15
262	Salesman, Foodstuffs, Beverages, Tobacco		93																				93
266	Salesman, Chemicals & Drug Preparations								17														17
273	Salesman, Metal & Metal Products															2							2
274	Salesman, Housefurnishings			4																			4
276	Salesman, Ind. Const. Mining & Drilling Equip.															2							2
277	Salesman, Farm & Garden Equip. & Supplies		3																				3
284	Salesman, Scientific Apparatus																		2				2
290	Sales Clerks		2																				2
292	Routemen		23																				23

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	ORDNANCE & ACC.	FOOD & KEL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & KEL.	PRINTING, PUBL. & REL.	CHEMICALS & KEL.	PETROLEUM REF & KEL.	RUBBER & PLASTIC	LEATHER & KEL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
	(3) Service Occupations																						
316	Meatcutters (not slaughtering)		3																				3
363	Pressing Occ.			44																			44
381	Porters & Cleaners	120	10	13			7		1		49												200
	(4) Farming, Fishery, Forestry & Rel. Occ.																						
406	Horticultural Specialty Work												53										53
407	Gardening & Groundskeeping																3						3
409	Plant Farming		40						11														51
412	Poultry Farming		11																				11
424	Farm Machinery Operator								2														2
429	Misc. Farming & Rel.		10																				10
	(5) Processing Occ.																						
500	Electroplating														4		9						13
503	Pickling, Cleaning, Degreasing & Rel.															5							5
504	Heat Treating												12			11							23
512	Melting												11										11
514	Pouring & Casting												63										63
518	Molders, Coremakers & Rel.			18									31		6	5							60
519	Ore Refining & Foundry Work			22					2				195			32							251
520	Mixing, Compndg., Blndg., Kneading, Shaping		24												4								28
521	Separating, Crushing, Milling, Chopping		27																				27
523	Heating, Rendering, Melting, Drying...		33																				33
525	Slaughtering, Breaking Curing		211																				211

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	ORDNANCE & ACC.	FOOD & REL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & REL.	PRINTING, PUBL. & REL.	CHEMICALS & REL.	PETROLEUM REF & REL.	RUBBER & PLASTIC	LEATHER & REL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
	INDUSTRY GROUPS																						
526	Cooking & Baking		42																				42
529	Processing, Food & Rel.		2619																				2619
534	Calendering, Sizing, Coating & Rel.						6																6
539	Processing, Paper & Rel.		3				4																7
550	Mixing & Blending																		2				2
556	Casting & Molding										73												73
557	Extruding						11				6												17
558	Reacting								41														41
559	Processing Chemical & Rel.		2						477		176				18								673
569	Processing, Wood & Wood Products				51		6																57
573	Baking, Drying & Heat-treating												1										1
574	Impregnating Coating & Glazing																	10					10
575	Forming												201										201
579	Processing, Nonmetallic Minerals												275			82							357
589	Processing, Leather & Textiles		114									17											131
599	Misc. Processing Occ.												49										49
	(6) Machine Trade Occ.																						
600	Machinists & Rel.	10	9						16		3			2	15	188	11	9	2	7			272
601	Toolmakers & Rel.	1												6	6	104	54						173
602	Gear Machining															2							2
603	Abrading													9		11							20
604	Turning										6			10	17	100	22		102				257
605	Milling & Planing															83							83
606	Boring															69							69
607	Sawing				4																		4
609	Metal Machining	400	19		1	37	22		30				64	67	172	922	60	77	120	115			2106

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	ORDNANCE & ACC.	FOOD & REL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & REL.	PRINTING, PUBL. & REL.	CHEMICALS & REL.	PETROLEUM REF & REL.	RUBBER & PLASTIC	LEATHER & REL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
	INDUSTRY GROUPS																						
614	Extruding & Drawing														20								20
615	Punching & Shearing												4		20	21				20			65
616	Fabricating Mchn. Work						4		40						40								84
617	Metal Forming														81	4		11					96
619	Misc. Metalworking						44							6	50	89	324	32		27			572
620	Motorized Vehicle & Eng. Equip. Repair												10										10
626	Metalworking Machinery Repair															2				4			6
638	Misc. Machine Installation & Repair		30				9		2					4	5	9							59
639	Mechanics & Machinery Repairmen															34							34
641	Folding, Creasing, Scolding & Gluing						1																1
643	Corrugating work						229	327															556
649	Paperworking						2																2
650	Typesetting & Composing							38															38
651	Printing Press Work						14	107												2			123
653	Bookbinders & Rel.							2															2
659	Printing Work							6															6
660	Cabinet makers				5	15												2		8			30
661	Patternmakers													2									2
664	Turning				7																		7
667	Sawing				18																		18
669	Wood Machining				12																		12
690	Plastics, Synthetics, Rubber & Leather Work										18				6	3							27
699	Misc. Machine Trades Occ.														6	11							17
	(7) Bench Work Occ.																						
705	Filing Grinding, Buffing, Cleaning & Pol.				11	10							41	17	12	113							356
706	Metal Unit Assembly & Adjusting		6		14	5		10						343	47	177		7		15			1054

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	ORDNANCE & ACC.	FOOD & REL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & REL.	PRINTING, PUBL. & REL.	CHEMICALS & REL.	PETROLEUM REF & REL.	RUBBER & PLASTIC	LEATHER & REL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
INDUSTRY GROUPS																							
710	Fab. & Rpr. of Instru. to Meas. Phys. Char.								40						16		26		5				87
714	Fab. & Rpr. of Photo Equip & Supplies																		16				16
720	Assembly & Rpr. of Radio & TV																54						54
721	Assembly & Rpr. of Motors, Gen. & Rel.															3							3
723	Assembly & Rpr. of Elec. Appl. & Fixtures																15						15
726	Assembly & Rpr. of Elec. Components													68			105						173
727	Storage Battery Assembly																41						41
729	Assembly & Rpr. of Elec. Equip.																240						240
731	Fab. & Rpr. of Games & Toys					3																	3
732	Fab. & Rpr. of Sporting Goods																			25			25
737	Fab. of Amm., Fireworks, Explosives & Rel.	761																					761
739	Fab. & Rpr. of Assorted Materials					10									35		44			106			195
740	Painters, Brush				1																		1
741	Painters, Spray														9	10				2			21
749	Painting, Decorating & Rel. Work						2																2
754	Fab. & Rpr. of Misc. Plastics					10	36		252		91									24			413
761	Layingout, Cutting, Shaping & Sanding Wood Pr					30												2					32
762	Assembly of Wood Products				5	23																	28
763	Fab. & Rpr. of Furniture					34																	34
769	Fab. & Rpr. of Wood Products				31	65												7					103
771	Stone Cutting & Carving												3										3
780	Upholstering, Mattress Fab. & Rpr.					10																	10
781	Laying Out, Marking, Cutting & Punching			14																			14
782	Handsewers Menders, Embroid, Knit, & Rel.			35																			35
784	Fab. & Rpr. of Hats, Gloves & Rel.																			7			7
785	Tailors & Dressmakers			64																			64
787	Sewing Machine Oprs., Nongarment			648		15	7													76			743
789	Fab. & Rpr. of Textile Leather & Rel.		9																				9

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	ORDNANCE & ACC.	FOOD & REL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & REL.	PRINTING, PUBL. & REL.	CHEMICALS & REL.	PETROLEUM REF & REL.	RUBBER & PLASTIC	LEATHER & REL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
	INDUSTRY GROUPS																						
	(8) Structural Work Occ.																						
801	Fitting, Bolting, Screwing & Rel.															14							14
804	Tinsmiths, Coppersmiths & Sheet Metal		14		2										441	100		259					816
806	Transportation Equip. Ass. & Rpr.															13							13
809	Misc. Metal Fabrication													6	18								24
810	Arc Welders					10									84	28				5			127
811	Gas Welders															4		4					8
812	Combination Arc & Gas Welders		3											5	161	234		66		18			487
813	Resistance Welders																	5		12			17
819	Welders, Flame Cutters & Rel.															1							1
824	Lighting Equip. Building Wiring & Rpr.												1			5	12						18
827	Large Hsld. Appl. & Com. & Ind. Equip														8		1421						1429
828	Elect. & Electr. Prod. Fab. Inst. & Rpr.															3							3
829	Assembly Instl. & Rpr. Electrical Prod.	1																2					3
840	Construction & Mntnc. Painting & Rel.															2							2
850	Excavating, Grading & Rel.												20										20
853	Asphalt Paving									8													8
860	Carpenters & Rel.		6		90	3												81		13			193
862	Plumbers, Gasfitters, Steamfitters & Rel.																	2					2
865	Glaziers & Rel.				3										12								15
869	Misc. Construction Work												66							18			84
899	Misc. Structural Work		8		4		5		8				4		3	8			2				42
	(9) Miscellaneous Occupations																						
900	Concrete Mixing Truck Drivers												299										299
902	Dump Truck Drivers												4										4
905	Truck Drivers, Heavy		128		12				28	4			266										438

DOT NO.	DETAILED OCCUPATIONAL GROUP TITLE	ORDNANCE & ACC.	FOOD & REL.	APPAREL	LUMBER & WOOD	FURNITURE & FIXT.	PAPER & REL.	PRINTING, PUBL. & REL.	CHEMICALS & REL.	PETROLEUM REF & REL.	RUBBER & PLASTIC	LEATHER & REL.	STONE, CLAY & GLASS	PRIMARY METAL IND.	FABRICATED METAL	MACHINERY (NOT ELEC.)	ELECTRICAL MACHN.	TRANSPORTATION EQP.	CONTROL INSTR.; PHOTO GOODS; TIME INSTR.	MISC. MFG.			TOTAL
906	Truck Drivers, Light		18													5							23
920	Packaging		356		1		73		50											10			490
921	Hoisting & Conveying		12						2				5										19
922	Materials Moving & Storing	100	73		63	9	4	6	9				5		10	34							313
929	Packaging & Material Handling		75		7	10	12	16			11		52	20	14	131	8	4					360
930	Boring, Drilling, Cutting & Rel.												10										10
932	Loading & Conveying									4													4
939	Extraction of Minerals												4							4			4
970	Art Work, Brush, Spray or Pen																						18
971	Photoengraving							18															62
973	Handcompositors, Typesetters & Rel.							62															2
975	Stereotypers & Rel.							2															2
977	Bookbinding & Rel.							2															16
979	Graphic Art Work						10	6															
	TOTALS	1452	4192	822	485	306	505	858	1139	16	433	17	1427	662	1664	3142	2789	341	580	528			21,373

INDUSTRY GROUPS

PUBLICATIONS

INDUSTRIAL RELATIONS CENTER

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